

Office of Economic Recovery & Investment

THE GOVERNOR'S BROADBAND TECHNOLOGIES OPPORTUNITY COMMITTEE

Report to Governor Perdue

October 8, 2009

OFFICE OF ECONOMIC RECOVERY AND INVESTMENT REPORT: THE GOVERNOR’S BROADBAND TECHNOLOGIES OPPORTUNITY COMMITTEE

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Report from the meetings of the Governor's Broadband Technology Opportunities Program
(BTOP) Review Committee

1. Program Background

The ARRA was signed by President Obama on February 18, 2009. Part of the bill directed \$7.2 billion into two interrelated programs: the Broadband Initiatives Program (BIP) and the Broadband Technology Opportunities Program (BTOP), to be administered by the USDA Rural Utilities Service and the Department of Commerce National Telecommunications and Information Administration (NTIA). The statutory goal of these programs is to expand broadband access to unserved and underserved communities across the U.S., increase jobs, spur investments in technology and infrastructure, and provide long-term economic benefits. BIP will make loans and grants for broadband infrastructure projects in rural areas. BTOP will provide grants to fund broadband infrastructure, public computer centers and sustainable broadband adoption projects.

The BIP/BTOP programs were jointly administered by the two federal agencies, and a Notice of Funding Availability (NOFA) and application were released on July 1, 2009. The first of multiple rounds of funding closed on August 14th and represented more than half of all the funding under the program, with up to \$2.4 billion in BIP and \$1.6 billion in BTOP available.

The BTOP grant program is divided into three major funding areas which do not compete between categories for funding:

1. The **Broadband Infrastructure** category (up to \$1.2 billion) contains both Middle Mile and Last Mile projects that bring broadband service to unserved and underserved areas.
 - a. An “**Unserved Area**” is defined as an area, composed of one or more contiguous census blocks where at least 90 percent of households in the proposed funded service area lack access to facilities-based, terrestrial broadband service, either fixed or mobile, at the minimum broadband speed.
 - b. An “**Underserved Area**” is defined as an area composed of one or more contiguous census blocks where at least one of the following is met:
 - i. no more than 50 percent of households in the proposed funded service area have access to facilities-based, terrestrial broadband service at greater than the minimum broadband speed;
 - ii. no fixed or mobile broadband service provider advertises broadband speeds of at least 3 Mbps downstream in the proposed funded service area; or
 - iii. the rate of broadband subscribership for the proposed service area is 40 percent of households or less.
2. **Public Computer Center** category (up to \$50 million) funds projects that expand computer center capacity, entities that permit the public to use these computer centers, such as community colleges and public libraries. This category of funding had by far the most North Carolina Service Area applicants.

3. **Sustainable Broadband Adoption** category (up to \$150 million) funds innovative projects that promote broadband demand, such as projects focused on broadband education, awareness, training, access, equipment or support, particularly among vulnerable populations.

The NOFA described a review process that allowed for input by Governors on BTOP, and Governor Perdue has received a list of the applications pertaining to North Carolina that are under consideration by NTIA. This process was designed to give the NTIA feedback from the Chief Executive's perspective on which projects would have the highest benefits to a given state, including economic impact, and to provide information on the working relationship between applicants and a given state. Governor Perdue is permitted to provide a list and prioritization of recommended projects, along with an explanation of why the selected proposals meet the greatest needs of the state. States have been strongly encouraged to provide mapping and planning data to support their recommendations. All states will have 20 calendar days from the date of notification to submit to NTIA their recommendations. Recommendations are due by October 14 at close of the business day.

2. Committee Purpose and Process

Governor Perdue established a blue ribbon committee to assist her in the review and comment of North Carolina service area BTOP applications. The North Carolina BTOP Review Committee was comprised of leaders from the public, private and nonprofit sectors who are familiar with the connectivity challenges that exist in North Carolina. This eight-member committee self-selected on the basis of expertise and interest into two sub-committees, one with responsibility for reviewing applications in the **Infrastructure** category and one with responsibility for applications in both the **Public Computing Center** and the **Sustainable Broadband Adoption** categories. Technical and Administrative Support was supplied by the e-NC Authority.

The e-NC Authority used the list of North Carolina Service Area applications provided by NTIA to create a list-serv of applicants. Requests for information were sent to every applicant on the list-serv for a copy of an applicant's full BTOP application, as that was not provided by NTIA. Special consideration was given to confidential or proprietary information contained in applications, and applicants were asked to mark which portions of applications would not fall under North Carolina's open records law. The e-NC Authority placed the applications into a password-protected database that could only be accessed by members of the applicable sub-committee. Members of the respective sub-committee then reviewed applications using scoring sheets based on NTIA's scoring sheets, developed through internal discussions of the subcommittee. The subcommittees met in open meetings on individual days to discuss and rank applications. The meetings were listed on the OERI website www.ncrecover.gov, open to the public, and streamed online through a webinar/conference call system with an e-mail invitation send to an e-NC's applicant listserv. It is important to note that each sub-committee only reviewed applications that were voluntarily submitted to the e-NC Authority by the list of applicants provided by NTIA. There were some applicants that may not have been on the North Carolina service area list provided by the NTIA, did not respond, or did not submit a full application and were not considered by the Committee (this includes three North Carolina

applicants who did not respond: Fayetteville State University, Surry county Community College and the City of Wilson).

3. Infrastructure Sub-committee

For the purposes of the NC BTOP Review Sub-Committee on Infrastructure, applications were grouped into three categories: (1) Multistate (proposals that were not restricted to North Carolina but included North Carolina as one of multiple states to be served); (2) Middle Mile proposals targeting North Carolina service area; or (3) Last Mile proposals targeting North Carolina service areas. Staff from the e-NC Authority provided administrative support to the Office of Economic Recovery and Investment (OERI) and, upon request, technical advice to the Infrastructure Review Committee.

a. Committee members

Members of the Infrastructure Applications Review Sub-Committee (and their professional affiliation) included the following:

- Michael Fenton – N.C. Information Technology Services
- Dennis Holton – Craven County Government
- James Lowery – Private Businessman, High Point NC
- John McHugh – Policy Analyst, N.C. Office of Economic Recovery and Investment, Office of the Governor

b. Process used for deliberations

The Sub-committee on Infrastructure followed the process outlined below in its efforts to develop the recommendations that are included in this report.

The Sub-committee on Infrastructure met via teleconference to plan the review process, finalize a scoring sheet, and obtain abstracts of each infrastructure proposal and supporting materials. Reviewers received individual access codes to a password-protected Web site that provided reviewers with copies of full proposals supplied by the applicants in response to a request from e-NC (working on behalf of the OERI). The Sub-committee was scheduled for Friday, October 2 from 9:30 a.m. - 3:00 p.m. at the N.C. Department of Transportation EIC Room, and was listed on the www.ncrecover.gov Web site, as both an open meeting and an open webinar. Additionally, applicants were informed directly by email of this public meeting and of the opportunity afforded them by the public meeting to offer comments directly to the Infrastructure Review Committee before the Committee's deliberations began. The meeting was attended by interested members of the public in person and over the webinar. The purpose of the meeting was to discuss the merits of each application individually to rank and develop a prioritized list of applications recommended by the Committee for further consideration by Governor Perdue (Appendix Document 5, Infrastructure Committee Agenda).

A total of 19 Infrastructure applications were included on the list forwarded by NTIA to Governor Perdue, including nine submitted by North Carolina-based applicants proposing

broadband projects that targeted North Carolina counties and 10 multi-state applications that proposed to deliver service in North Carolina and other states. Of the North Carolina-based applications, two targeted last mile delivery and three targeted middle mile with a last mile component. The proposals were divided into sections for discussion by technology: satellite-based provider models, terrestrial-based wireless models and wireline models. Prior to discussion of these sections' proposals, an opportunity to hear a brief overview on the technology used in the proposals was presented and questions were posed by the committee on points of clarification they felt were needed. This was provided by the staff of the e-NC Authority.

An overview of each application was presented to the Infrastructure Review Committee by John McHugh of OERI. Discussion was held on each proposal. At the end of the proposal discussion, the committee focused on the priorities they felt were important for decision-making relating to this round of NTIA funding for greater broadband deployment in North Carolina:

1. If the application met local and statewide need for immediate deployment of broadband and demonstrated a strong commitment to outreach necessary to make their project successful for North Carolina citizens,
2. If the applicant had the capability to provide "shovel-ready" deployment of broadband and meet the NTIA timeline deadlines for project completion,
3. If the application has the potential to act as a base for future development to expand the reach of the broadband network to the local region and meet region's need for expansion of bandwidth
4. If the applicant has past experience with broadband projects in general and what, if any, of their experience has been in North Carolina,
5. If the application shows evidence of collaboration with other broadband providers (both middle and last mile providers) and its willingness to meet demands of important educational, health and public safety institutions, and
6. If the applicant has the capability to be compliant with reporting mandates by the federal stimulus oversight agencies as well as to report to the appropriate state oversight agencies.

c. Recommendations of the Sub-committee on Infrastructure

The following applications, in order of priority, are recommended to the Governor by the Infrastructure Sub-Committee of the Governor's BTOP Advisory Committee.

Applicant	MCNC Research Triangle Park, NC
Project title	Building a Sustainable Middle-Mile Network for Underserved Rural NC
Program	BIP/BTOP
Proposed Project Area	NC
Project type	Middle Mile
Grant request	\$ 28,225,520

Description	MCNC will build a sustainable middle-mile broadband network connecting urban central NC with underserved rural southeastern and western NC. The project addresses statutory goals by improving affordability and access for education, health care, community institutions, and last-mile providers. Led by a proven team, the project is shovel-ready and is supported by an \$11.76M cash and in-kind match.
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MCNC’s application was the overall-highest scoring application of the Sub-committee.* The Sub-committee felt that the MCNC application was the strongest overall application and the project proposed has the greatest potential for economic impact, the highest likelihood for economic transformation, and the best platform to move North Carolina into position for future projects. The Sub-committee liked the interconnectedness of the project with anchor institutions and the outreach MCNC had already engaged in to bring in a strong Last Mile component to an already impressive Middle Mile application.

*Subcommittee member John McHugh recused himself from consideration of this application.

Applicant	Education & Research Consortium of the Western Carolinas, Inc. Asheville, NC
Project title	WNC partnered multi-county fiber solution serving residential, public safety, and medical needs.
Program	BIP/BTOP
Proposed Project Area	NC
Project type	Middle Mile
Grant request	\$ 38,755,734
Description	ERC Broadband will add 72 miles of sustainable middle mile fiber infrastructure in Graham and Buncombe counties supporting anchor institutions, public safety facilities, and government entities. A last mile fiber-to-the-home network to 97 percent of households and businesses in Yancey and Mitchell counties will be combined with a 43-mile middle mile fiber build through McDowell County for redundancy.

The Sub-committee unanimously chose the ERC proposal as the second application to highlight to the Governor. The Sub-committee was impressed by the focus on Western Underserved North Carolina as the focus of the application. This application was also attractive due to its public focus, its high interaction with existing anchor institutions and other public bodies (including MCNC, whose BTOP application the ERC project referenced).

Applicant	French Broad Electric Membership Corporation Marshall, NC
Project title	French Broad Electric BPL Project
Program	BIP/BTOP
Proposed Project	NC

Area**Project type** Last Mile Remote Area**Grant request** \$ 1,470,991**Description** French Broad Electric will utilize the existing power lines and fiber optic cable already in place to provide high speed internet service to the rural areas of Madison County that do not currently have any high speed service. Residents will be able to have an affordable, reliable service from their electricity provider. This is not the Broadband over Power Line (BPL) technology but rather broadband over fiber deployed on existing poles carrying electrical distribution lines.

The French Broad Electric Membership Corporation was the final BTOP application the Sub-committee wanted to recommend to the Governor. The French Broad was the only Last Mile application recommended because of the focus on an unserved area in a high-poverty area. Also attractive in this application is the reliance on existing infrastructure and a solid business model and realistic goals for pricing and uptake. The application was submitted by a well-regarded public entity with long roots in the community, an experienced handler of federal funds.

Additionally, the Sub-committee wanted to highlight two additional applications they felt were strong and deserving of praise, if not rising to the level of a recommendation to the Governor. The Dale Media application, which was a Last Mile Remote Area application that the Sub-committee felt was a strong, focused application from a small husband-and-wife business in Snow Hill, North Carolina. The Sub-committee felt the application was interesting not only because it was a very small company making a very compelling application for federal funds, but also because the application showed a strong vision for growth in the community and a strong dedication to work with and provide service for existing institutions. The second application the Sub-committee wanted to highlight was NCTH Cleartalk. The Cleartalk application was the only non-North Carolina application singled out for additional comment by the Sub-committee. The Cleartalk plan envisioned bringing Last Mile wireless to Eastern North Carolina. The Sub-committee liked the focus on the rural area and the innovating nature of the proposal, but concerns over the overall economic impact in North Carolina, the viability of the technology and technical issues with the application itself kept the Sub-committee from recommending it to the Governor.

4. Sustainable Broadband Adoption and Public Computer Center programs

Introduction

The SBA/PCC Sub-committee reviewed projects in two funding categories due to the high rate of interconnectedness and, often, the combined nature of the applications. The projects in these two categories were extremely varied and included everything from regionally-focused renovation programs to national programs for varied purposes such as public safety software development programs. The Sub-committee's charge was to evaluate and rank the proposals on the basis of North Carolina impact, and the Sub-committee only considered national programs to the extent they would have an impact in this state. Staff of the e-NC Authority provided administrative support to the Office of Economic Recovery and Investment (OERI) and, upon request, technical advice to the Infrastructure Review Committee.

a. Membership

Members of the SBA/PCC Sub-committee and their professional affiliation included the following:

- Cynthia Marshall—President, AT&T North Carolina
- Dr. Lee Mandell—UNC-Chapel Hill School of Government and Former North Carolina League of Municipalities Research Director
- Terry Bledsoe—Chief Information Officer for Catawba County
- Sandy Babb—Private Business

b. Process

A total of 44 Sustainable Broadband Adoption (SBA) proposals were included in the list forwarded by NTIA to Governor Perdue. Three SBA proposals were submitted by North Carolina-based applicants whose proposed services to specific North Carolina counties included one-to-one outreach efforts, advanced broadband antenna design and enhanced broadband services for area preparedness and public safety. A total of 27 Public Computing Center (PCC) applications were included in the list forwarded by the NTIA to Governor Perdue, including 16 that originated in North Carolina and 11 applications that were submitted by organizations that proposed serving North Carolina as one of multiple states specified in their application. While all applications addressed the need for expanded and enhanced facilities offering public access to broadband, some were further distinguished by their additional attention to digital literacy, job-training and outreach to vulnerable populations.

Due to the high number of applications before the Sub-committee and given the limited time frame of the public meetings, each application could not be individually reviewed in the open

committee. Instead, the Sub-committee developed a process in which each Sub-committee member would nominate 10 applications from the combined categories of Sustainable Broadband Adoption and Public Computer Centers for further discussion by the entire Sub-committee. After each member had nominated his or her top 10 applications, the group conferred to establish a consensus pool of applications that were debated before the Sub-committee and, finally, nominated a group of applications from each category for recommendation to the Governor.

c. Recommendations of the Sub-committee on SBA/PCC

The following applications, in order of priority, are recommended to the Governor by the Sub-committee for SBA/PCC of the Governor's BTOP Advisory Committee for Public Computer Centers Program:

Applicant Mitchell County Historic Courthouse Foundation
Bakersville, NC

Project title Mitchell County Virtual Learning and Communications Center

Grant request \$ 239,194

Description In collaboration with Mitchell County Public Library and Mayland Community College, the Center will provide access to broadband programs and services that will address specific educational and communication needs of displaced workers, farmers, high school dropouts, residents wanting college courses, health care workers, EMS personnel, educators, government officials, and small business persons.

The Sub-committee liked that this program addressed specific educational needs in a tier I, high dropout area (the dropout rate for Mitchell County is 35%). The Sub-committee felt that this program's multi-disciplinary approach had a high degree of interconnectedness to the community and anchor institutions, with clear deliverables and benchmarks for success that marked it as the stand-out proposal for the PCC area. Finally, while this project's cost is relatively low, there is a high potential for a significant level of economic development from this application.

Applicant Olive Hill Community Economic Development Corporation
Morganton, NC

Project title Valdese Public Computer Center

Grant request \$ 448,805

Description This project establishes a public computer center in downtown Valdese, NC targeting assistance to disadvantaged businesses, the unemployed, and individuals seeking higher educational attainment. Clients and the public will receive training through collaborative services with the local community college, the small business center, Town of Valdese, and traditionally disadvantaged businesses.

The Sub-committee felt this program had a strong focus on the leveraging of existing facilities and institutions and that this program represented a "turn-key" operation with the potential for a

strong area impact. The application is targeted at a high unemployment (14.9%), high-poverty (10%) and high-drop-out (32.7%) population. The area had already invested resources in the project and developed clear training curricula that the Sub-committee felt would maximize the community impact of this program.

Applicant City of High Point
High Point, NC
Project title Public Computing Access and Training for Jobseekers
Grant request \$ 261,835
Description The Public Computing Access and Training for Jobseekers project is collaboration between the City of High Point, NC, the High Point Public Library, and the Guilford County workforce consortium to provide increased computer access and training for jobseekers. This project will create training labs in the library and at the High Point office of the Guilford County workforce consortium.

The Sub-committee felt this program deserved mention because of its focus on targeting vulnerable populations (a high unemployment area with a high percentage of disabled and a population of Native Americans). The Sub-committee also felt that the high degree of community support and interconnectedness from community groups and anchor institutions made this program likely to be sustainable. The focus of the application on a children's educational lab was also an important factor in the Sub-committee's recommendation.

Applicant Housing Authority of the City of Wilson
Wilson, NC
Project title Milo L. Gibbs, Jr. Resource Center
Grant request \$ 200,000
Description The Milo L. Gibbs, Jr. Resource Center will be set up as a computer center that will provide computer usage and training to our clients. The computer center will be designed to assist 200-300 low income clients within the Housing Authority jurisdiction.

The Sub-committee focused on this application because it served an area of extremely high unemployment (32%) in an area of the state that is in economic transition. This application highlighted outreach to community organizations and a reliance on existing infrastructure. There were some concerns over some budgetary aspects of the program, and the Sub-committee did feel that the application would be more attractive if it were modified to reflect the extensive amount of infrastructure the project has access to that is not referenced in the application.

The following application is recommended to the Governor by the Sub-committee for SBA/PCC of the Governor's BTOP Advisory Committee for Sustainable Broadband Adoption Program:

Applicant McDowell County Schools
Marion, NC
Project title One-to-One Outreach
Grant request \$ 3,006,872

Description McDowell County Schools application is for acquiring broadband and end-user related equipment for: a)networking capabilities; instrumentation, hardware, software, digital network technology; b)training, education, support, and awareness for school-wide and public outreach campaigns; c)innovative programs to provide public greater access to broadband service, devices, and equipment.

The McDowell County Schools One-to-One project is the only Sustainable Broadband Adoption project recommended by the Sub-committee to the Governor. The Sub-committee felt that this was a strong program because it's based on a proven type of project and that McDowell County had already invested in a year-long feasibility study of the program and conducted community outreach. The program is tied to a Tier I area with high unemployment (16%) in a rural, unserved community. The Sub-committee felt this program would serve several statutory goals of the BTOP program, including training, developing computer literacy, economic development, and building demand for high-speed broadband in the community.

There were four applications in the Sub-committee that received multiple individual recommendations but were not recommended by the full committee. Those programs, all included in the Public Computer Centers Area were: The Durham County Public Computer Center Application, the City of Greensboro Public Computer Center application, the Town of Chapel Hill Public Computer Center application and WinstonNet, Inc.

5. Conclusion

The BTOP Review Committee would like to thank the Governor for the opportunity to provide review and comment for this important ARRA Recovery project. The Committee feels that high speed broadband development, particularly to unserved and underserved areas, is not only important for immediate economic and educational impact, but critical to move North Carolina's economy from an agricultural and manufacturing base to a robust 21st Century Economy.

If there was a central theme to the two Sub-committee Meetings it was that what was best for North Carolina was the development of programs and investments in North Carolina. The recommendations from both Sub-committees reflect a clear preference for the development of infrastructure and programs that provide a platform for future growth in broadband outreach and demand in North Carolina.

Please find attached material used by the Sub-committee in their deliberations, including maps of unserved and underserved areas, scoring sheets, the full list of North Carolina Service Area applications, and a sampling of scored applications. It is worth noting that while the BTOP review committee was an advisory group and not covered under the ethics law, every member of the group provided a signed, notarized document attesting that they would abide by all North Carolina statutory ethic and open meetings laws. Copies of these documents are also attached.